

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-5, 9-10, 15 and 79-90 are presently active, Claims 6-8, 11-14, 16-74 and 76-78 have been previously canceled without prejudice, Claims 75 is canceled without prejudice by the present amendment, and Claims 1-5, 9-10, 15, 79-85 and 87-90 are amended. No new matter is added.

In the outstanding Office Action, Claim 88 was objected to because of informalities. Claim 15 was rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 1, 5, 9, 15, 75, 79 and 83-85 were rejected under 35 U.S.C. § 102(e) as anticipated by Yamashita (U.S. Pat. No. 5,875,100). Claims 2-3 and 81-82 were rejected under 35 U.S.C. § 103(a) as unpatentable over Yamashita in view of Sakaguchi et al. (U.S. Patent No. 5,837,624). Claims 2-4, 10, 80-82 and 86-90 were rejected under 35 U.S.C. § 103(a) as unpatentable over Yamashita in view of Ehman et al. (U.S. Patent No. 6,021,050).

Regarding the objection to Claim 88, Claim 88 is amended to address the informalities. Thus, it is respectfully submitted that the objection to Claim 88 is overcome.

Regarding the 35 U.S.C. § 112, second paragraph, rejection of Claim 15, Claim 15 is amended to clarify the claimed subject matter. Thus, it is respectfully submitted that the 35 U.S.C. § 112, second paragraph, rejection is overcome.

Applicants wish to thank Examiner Tuan Dinh for the courtesy of an interview granted to Applicants' representative on August 30, 2006, at which time the outstanding issues in this case were discussed. Claims 1 and 15 are amended so as to distinguish over the applied references, as indicated by the Examiner. Therefore, independent Claims 1 and 15 and the pending Claims 2-5, 9-10, 79-85 dependent directly or indirectly from Claims 1 and 15 are believed to be allowable.

Regarding the rejection of Claims 86-90, Applicants respectfully traverse the outstanding grounds for rejection, because in Applicants' view, independent Claim 86 patentably distinguishes over the applied references, and a prima facie case of obviousness is not established, as discussed below.

Claim 86 recites, *inter alia*, "wherein each of said first, second and third resin substrates has a core made of glass cloth and impregnated with a resin." That is, **the second resin substrate having an opening, in which a ceramic capacitor is formed, has a core made of glass cloth and impregnated with a resin.** By using a substrate made of glass cloth and impregnated with a resin for the second resin substrate, a coefficient of thermal expansion of the second resin substrate is set to close to a coefficient of thermal expansion of the ceramic capacitor, which is formed in the second resin substrate. Therefore, even if an internal stress occurs by a difference in the coefficients of thermal expansion of the second resin substrate and the ceramic capacitor, cracks and separations less occur to the second substrate, making it possible to attain high reliability and prevent the occurrence of migration. Further, the glass cloth in the second resin substrate prevents the expansion of the cracks. Thus, there can be obtained unexpected advantages to use a glass cloth as a core material of the second resin layer.

The Office Action acknowledges that Yamashita does not disclose the first, second and third resin substrates having a core made of glass cloth and a resin impregnated with a resin (Office Action at page 7, lines 1-5). Instead, the Office Action cites Ehman et al. to remedy the deficiencies of Yamashita, asserting that Ehman et al. teaches a printed wiring board comprising layers (12, 14 and 16) each made of glass cloth and a resin impregnated with a thermosetting resin (Office Action at page 7, lines 6-8). However, Applicants respectfully traverse the outstanding obviousness rejection, as discussed below.

First, it is respectfully submitted that in order to properly combine or modify references for the purpose of the obviousness rejection, *the references must suggest the desirability of a proposed combination or modification beyond the mere fact that references can be combined or modified.*¹ CAFC established that *substantial evidence of motivation or teaching must be shown for combining or modifying the references,*² and also that such modification requires “*clear and particular evidence.*”³ It is improper to combine references where the references *teach away* from their combination.⁴

Ehman et al. describes the intermediate layers (18 and 20), in which capacitors (44, 46 and 48) are formed, are made of thermal setting resin (Ehman et al. at column 5, lines 43-46). That is, Ehman et al. does not teach or suggest using a glass cloth as a core material of the substrate having an opening, in which a capacitor is formed. Although Ehman et al. describes that a glass cloth is used as a core material of layers (12, 14 and 16), Ehman et al. do not teach or suggest that the intermediate layer (18 and 20) accommodating a capacitor (44, 46 and 48) comprises a glass cloth as a core material. Since the intermediate layers (18 and 20) do not have a glass cloth as a core material, the structures disclosed in Ehman et al. cannot decrease the generation of cracks and separations in the intermediate layers (18 and 20), in

¹ MPEP 2143.01, In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). See also MPEP 2144.08 III stating that “[e]xplicit findings on motivation or suggestion to select the claimed invention should also be articulated in order to support a 35 U.S.C. 103 ground of rejection Conclusory statements of similarity or motivation, without any articulated rational or evidentiary support, do not constitute sufficient factual findings.”

² In re Gartside, 203 F3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000) (holding that, consistent with the Administrative Procedure Act at 5 USC 706(e), the CAFC reviews the Board's decisions based on factfindings, such as 35 U.S.C. § 103(a) rejections, using the 'substantial evidence' standard because these decisions are confined to the factual record compiled by the Board.).

³ In re Dembiczak, 175 F3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“We have noted that evidence of a suggestion, teaching, or motivation to combine/modify may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, although ‘the suggestion more often comes from the teachings of the pertinent references.’ The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular.”) (emphasis added).

⁴ In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)

which a capacitor is formed, and cannot attain high reliability and prevent the occurrence of migration.

Further, generally, it is difficult to process a substrate containing a glass cloth as a core material, compared with a substrate having no glass cloth. Therefore, there is no suggestion or motivation in Ehman et al., which merely describes a glass cloth is used as a core material of layers (12, 14 and 16), to modify the printed circuit board (20) of Yamashita to comprise a glass cloth as a core material.

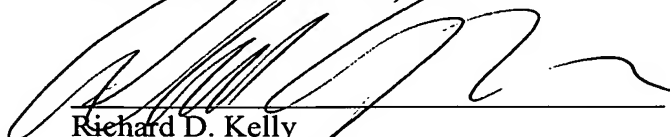
Thus, even combination of Yamashita and Ehman et al. fails to teach or suggest that the second resin substrate having an opening, in which a ceramic capacitor is formed, has a core made of glass cloth and impregnated with a resin. Therefore, Applicants respectfully submit that a prima facie case of obviousness is not established.

Accordingly, independent Claim 86 patentably distinguishes over the applied references. Therefore, Claim 86 and the pending Claims 87-90 dependent from Claim 86 are believed to be allowable.

Consequently, in view of the present amendment and in light of the above discussions, it is believed that the outstanding rejection has been overcome, and the application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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